What is claimed is:

1. An optical disk for recording or/and reproducing information by using a laser beam comprising:

a substrate formed by an inorganic material having elastic modulus of 2400MPa or more, or a mixture of inorganic and plastic materials;

a reflective layer formed on the substrate;

a cover layer formed on the reflective layer; and

a protective layer formed on the cover layer,

wherein, the laser beam for recording or/and reproducing the information is incident on the protective layer and the cover layer.

2. The optical disk as claimed in claim 1, wherein the information is recorded in the surface of the substrate.

3. The optical disk as claimed in claim 1, wherein a recording layer is formed between the reflective layer and the cover layer so as to record the information therein.

4. The optical disk as claimed in claim 3, wherein dielectric layers are respectively formed between the substrate and the reflective layer, between the reflective layer and the recording layer, and between the recording layer and the cover layer.

5. The optical disk as claimed in claim 1, wherein the elastic modulus of the substrates is tensile and flexural modulus.

6. The optical disk as claimed in claim 1, wherein the substrate is formed of any one of Aromatic Polyether type material such as PEEK (Poly-ether-ether-ketone), PEK (Poly-ether-ketone), PPS (Poly-phenylene-sulfone), Bisphenol A polysulfone, and PES (Poly-ether-sulfone), Aromatic Polysulfide type material such as PPS (Poly (p-phenylene) sulfide or poly (thio-1,4-phenylene)), Aromatic Polyimide type material such as PI (Polyimide), PEI (Poly-ether-imide), PAI (Poly-amide-imide), BMI (Bismaleimide), LCP (Liquid Crystalline Polymer), and PMMA.

7. The optical disk as claimed in claim 1, wherein the elastic modulus of the substrate is about 3200-3300MPa, and the substrate is formed of polyetherimide resin.

8. The optical disk as claimed in claim 1, wherein the substrates has an inside diameter of 1-15 ㎜, and an outside diameter of 15-57 ㎜.

9. The optical disk as claimed in claim 1, wherein a total thickness of the cover layer and the protective layer is about 10-220 ㎛, and a total thickness of the disk including the substrate is about 0.1-0.6 ㎜.

10. A method for manufacturing an optical disk comprising:

preparing a stamper having a heat-insulation layer on an upper surface and a pit pattern on a lower surface, and an inorganic material having elastic modulus of 2400MPa or more, or a mixture of inorganic and plastic materials;

forming a substrate in an injection molding method at a temperature between 100℃ and 200℃ by using the stamper, the inorganic material or the mixture of inorganic and plastic materials; and

sequentially forming a reflective layer, a cover layer and a protective layer on the substrate.

11. The method as claimed in claim 10, further comprising a DLC (Diamond Like Carbon) layer on the heat-insulation layer of the stamper.

12. The method as claimed in claim 10, further comprising a DLC (Diamond Like Carbon) layer on the pit pattern of the stamper.

13. The method as claimed in claim 10, wherein the heat-insulation layer of the stamper is formed of any one of a plastic material, an inorganic material, and a mixture of inorganic and plastic materials.

14. The method as claimed in claim 13, wherein the heat-insulation layer of the stamper is formed in a spin-coating method.